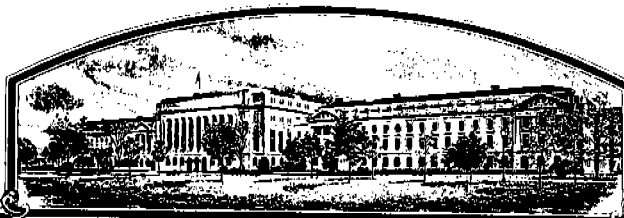


No.

7700042



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Custom Ag Service, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS OF THE OWNER OF THE RIGHTS. (34 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'Cascot B-2'

In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 15th day of February in
the year of our Lord one thousand nine
hundred and seventy-nine

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture



APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY AG-2	1b. VARIETY NAME Cascot B-2	FOR OFFICIAL USE ONLY PV NUMBER 7700042	
2. KIND NAME Cotton	3. GENUS AND SPECIES NAME Gossypim hirsutum	FILING DATE 2-3-77	TIME A.M. P.M.
4. FAMILY NAME (BOTANICAL) MALVACEAE	5. DATE OF DETERMINATION Sept. 1973	FEE RECEIVED \$ 250.00 \$ 250.00 \$ 250.00	DATE 2-3-77 3-9-77 9-21-78
6. NAME OF APPLICANT(S) Custom Ag Service Inc.	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O. Box 97 Loraine, Texas 79532	8. TELEPHONE AREA CODE AND NUMBER 1-915-737-2274	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Texas 11-7-69	11. DATE OF INCORPORATION 11-7-69

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Dr. John T. Presley, Registered Plant Breeder
3811 Courtney Circle, Bryan, Texas 77801

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☒ YES ☒ NO Later 9/5/75 9/12/7514B. Does the applicant(s) specify that this variety be limited as to number of generations? ☒ YES ☐ NO14C. If "Yes," to 14B, how many generations of production beyond breeder seed? ☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal? ☒ YES ☐ NO

16. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

12/1/77
(DATE)Ray J. Holland
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

Exhibit A - Cascot B-2

Origin and Breeding History

During the winter of 1972, under a memorandum of agreement, the Texas Agricultural Experiment Station released an advanced breeding strain of cotton to Custom Ag. Services Inc., which was designated TX-Bonham-720. We gave it our designation of AG-2 and this was later changed to B-2 with the "B" being an abbreviation for Bonham. The name, after consultation with members of our Staff Department of Agriculture, was changed to Cascot B-2 for the Variety.

AG-2 was planted at Veribest, Texas in 1973 in an observation plot. Some roguing of off-type plants was done. Individual plants were selected after which the block was bulk harvested. In 1974 the plant selections were planted in a nursery surrounded by plantings of the bulk harvest seed. The nursery was inoculated with races 1, 2, 7, and 10 of the Bacterial Blight pathogen. Progenies showing any susceptible plants were discarded and any susceptible plants in the surrounding block planting were rogued. Off type plants in the block planting were also rogued. The better progenies along with a number of individual plants were selected.

In the winter of 1974-75 the Texas A & M multi-adversity resistance (TAM-MAR) genetic improvement procedure was initiated, and individual plant selections and progenies were processed. This included observations on mold growth and slow germination of seed on water agar when held at 16°C for 8 days. Later inoculations and discarding of blight susceptible plants as well as those with weak resistance was done. The survivors were planted in pots and grown in the greenhouse for seed production. The 1975 nursery was planted at Loraine, Texas on land infested with the Verticillium wilt pathogen. In addition the nursery was inoculated with races 1, 2, 10 and 18 of the bacterial blight pathogen. The 1975 selections were made on the basis of resistance to Verticillium wilt, bacterial blight and also on agronomic performance. Roguing of off-type plants was continued in plantings of advanced strains

and in bulk plantings made from bulking of strains.

A composite of the better strains and progenies was made from the first Breeders seed increase in 1976.

Testing began in 1975 using seed composites of early selected strains. Fiber information from the progenies was obtained by sending samples of lint to the Textile Research Center at Texas Tech University, Lubbock, Texas. This is a recognized Fiber Testing Laboratory and results are accepted the world over as authentic.

After a variety is released the plant breeder strives to maintain varietal purity and uniformity by growing seed increase plots in isolation to prevent mixing with other varieties, and by removing any off-type plants that are found, to maintain uniformity.

The Cascot B-2 Variety is stable in the sense that when sexually reproduced it will remain unchanged with regard to its distinctive characteristics. It is also uniform in the sense that variations are describable and predictable. Cascot B-2 is a synthetic variety.

Off-types

Cascot B-2 has an off-type plant which occurs at a frequency of 5-10%. Repeated individual plant selections and progeny testing have failed to change the frequency of the off-types. Thus, it appears that this is an inherited genetic trait which cannot be easily changed by selection. The off-type plant is darker green in color, is less compact and stands more erect with a more reddish main stem than the normal Cascot B-2 plant.

Exhibit B ~~B~~ B

Cascot B-2

Statement of Novelty

Information from the Texas Agricultural Experiment Station indicated that Lankart 57 was one of several parents used in developing TX Bonham-760. Cascot B-2 is most similar to Lankart 57. Cascot B-2 differs from Lankart 57 in having a more compact fruiting pattern, the plant is more cylindrical in over all shape, plant color: pea green as compared with a darker green color for Lankart 57. Pea green is a color, yellowish-green in hue, of low saturation and of medium brilliance. The main stem of Cascot B-2 is lax and tends to lodge under a heavy fruit load whereas Lankart 57 stays erect. The fiber of Cascot B-2 is stronger than that of Lankart 57. The pea green plant color and the lax stem are not commonly found in Upland cotton varieties. Thus the plant color and lax stem are novelty traits in comparison with most U.S. Upland Varieties. Also Cascot B-2 is resistant to Fusarium wilt, Verticillium wilt and Bacterial blight, as indicated in Exhibit C, whereas Lankart 57 is susceptible to these diseases.

OBJECTIVE DESCRIPTION OF VARIETY

COTTON (GOSSYPIMUM SPP.)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Custom Ag Service Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

P.O. Box 97

Lorraine, Texas 79532

FOR OFFICIAL USE ONLY

PVPO NUMBER

7700042

VARIETY NAME OR TEMPORARY
DESIGNATION

Cascot B-2

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g. or) when number is either 99 or less or 9 or less.

1. SPECIES:

 1 = GOSSYPIMUM HIRSUTUM 2 = GOSSYPIMUM BARBADENSE

2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

☐ EASTERN ☐ DELTA ☒ CENTRAL ☒ HIGH PLAINS ☐ EL PASO AREA
☐ WESTERN LOW HOT VALLEYS ☐ SAN JOAQUIN ☐ OTHER (Specify) _____

3. MATURITY (50% Open Boll):

<input type="text" value="1"/> <input type="text" value="5"/>	NO. OF DAYS EARLIER THAN	<input type="text" value="7"/>	}	1 = COKER 310	2 = DELTAPINE 16	3 = STONEVILLE 213
<input type="text" value="0"/> <input type="text" value="0"/>	NO. OF DAYS LATER THAN	<input type="text" value="8"/>		4 = PAYMASTER 111	5 = ACALA 1517-70	6 = ACALA SJ-1
				7 = LANKART 57	8 = OTHER (Specify)	Tamcot Sp-37

4. PLANT HABIT:

 1 = SPREADING 2 = INTERMEDIATE 3 = COMPACT 1 = FOLIAGE SPARSE 2 = DENSE
3 = OTHER (Specify) _____

5. PLANT HEIGHT:

<input type="text" value="0"/> <input type="text" value="6"/>	CM. SHORTER THAN	<input type="text" value="5"/>	}	1 = COKER 310	2 = DELTAPINE 16	3 = STONEVILLE 213
<input type="text" value="0"/> <input type="text" value="4"/>	CM. TALLER THAN	<input type="text" value="7"/>		4 = PAYMASTER 111	5 = ACALA 1517-70	6 = ACALA SJ-1
				7 = LANKART 57	8 = OTHER (Specify)	

6. MAIN STEM:

 1 = LAX 2 = ASCENDING 3 = ERECT CM. TO FIRST FRUITING BRANCH NO. OF NODES TO FIRST FRUITING BRANCH
(from cotyledonary node)

7. LEAF:

 CM. WIDTH OF
WIDEST LEAVES
AT MATURITY

8. LEAF PUBESCENCE:

 1 = GLABROUS (HAIRS AS SPARSE AS D₂ SMOOTH)
2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF) 3 = PUBESCENT (STONEVILLE 213)
4 = HEAVY PUBESCENCE (H₁ OR H₂) 5 = OTHER (Specify) Lankart Sel. 57

9. LEAF COLOR:

 1 = VIRESCENT YELLOW 2 = LIGHT GREEN 3 = DARK GREEN (Acala-442) 4 = RED
5 = OTHER (Specify) Pea Green

10. LEAF TYPE:

 1 = NORMAL 2 = OKRA 3 = SUPER OKRA 4 = OTHER (Specify) _____

11. FLOWER:

 1 = NECTARILESS 2 = NECTARIED Petals: 1 = CREAM 2 = YELLOW Pollen: 1 = CREAM 2 = YELLOW

12. FRUITING BRANCH TYPE:

 1 = CLUSTER 2 = SHORT 3 = NORMAL 1 = DÉTERMINATE 2 = INDETERMINATE

13. GOSSYPOL CONDITION:

 1 = GLANDLESS 2 = REDUCED GLANDS 3 = NORMAL GLANDS 1 = NORMAL BUD GOSSYPOL
4 = OTHER (Specify) 2 = HIGH BUD GOSSYPOL

14. SEEDS:

 + SEED INDEX (Fuzzy seed basis) Seed Fuzz: 1 = SPARSE (GREGG 35) 2 = MODERATE (DPL-16) 3 = HEAVY (ACALA SJ-1) 4 = OTHER (Specify)

15. BOLLS:

7700042 CASCOT B-2

2 Locules: 1 = 3-4
2 = 4-5

2 9 NO. SEEDS PER BOLL

3 9 9 LINT PERCENT

3 7 MM. DIAMETER

3 Pitted: 1 = NONE
2 = FINELY
3 = COARSELY

6 5 7 GRAMS SEED COTTON PER BOLL

2 Breadth: 1 = BROADER AT BASE
2 = BROADER AT MIDDLE

2 Type: 1 = STORMPROOF (WESTBURN 70)
2 = STORM RESISTANT (LANKART 57)
3 = OPEN (DELTAPINE 16)

1 Shape: 1 = LENGTH < WIDTH
2 = LENGTH = WIDTH
3 = LENGTH > WIDTH

16. BRACTEOLAS:

3 Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH

1 Teeth: 1 = FINE 2 = COURSE

3 Teeth: 1 = 3-4 2 = 5-7 3 = 8-10
4 = OTHER (Specify)

17. YIELD: Compared to—

2 0 0 PERCENT LESS THAN

2 5 0 PERCENT MORE THAN

8 } 1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
7 } 4 = PAYMASTER 111 5 = ACALA 1517-70
6 = ACALA SJ-1 7 = LANKART 578, Tamcot Sp-37

18. FIBER LENGTH (Complete one or more of the following and give the means):

0 4 9 SPAN LENGTH 50%

1 0 5 SPAN LENGTH 2.5%

U.H.M. LENGTH

MEAN LENGTH

3 2 STAPLE LENGTH 32nd INCHES

UNIFORMITY RATIO (MEAN/U.H.M.)

4 7 UNIFORMITY INDEX (50% SPAN/2.5% SPAN)

19. FIBER STRENGTH AND ELONGATION:

0 8 2 1,000 P.S.I.

0 6 8 ELONGATION E₁

STILOMETER T₀

5 0 0 MICRONAIRE READING

1 0 4 YARN STRENGTH (Give test method)
Microspinning YTen

1 6 6 STILOMETER T₁

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

2 VERTICILLIUM WILT

2 FUSARIUM WILT

2 ROOT KNOT NEMATODE

2 BACTERIAL BLIGHT (Race 1)

2 BACTERIAL BLIGHT (Race 2)

0 ASCOCHYTA BLIGHT

1 PHYMATOTRICHUM ROOT ROT

0 RHIZOCTONIA

0 ANTHRACNOSE

1 RUST

0 OTHER (Specify)

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

0 BOLL WEEVIL

0 APHID

0 FLEAHOPPER

0 LEAFWORM

0 FALL ARMYWORM

0 GRASSHOPPER

0 LYGUS

0 PINK BOLLWORM

0 STINKBUG

0 THRIP

0 CUTWORM

1 SPIDERMIT

OTHER (Specify)

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- (1) Brown, Harry B., and J. O. Ware, 1958, Cotton, McGraw-Hill Book Company, Inc., New York.
- (2) Lewis, C. F., and H. H. Ramey, Jr., 1971, 1970 Regional Cotton Variety Tests, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.

Attachment 1

Exhibit C, PVPO Number _____ Variety Cascot B-2

20. Diseases

(0=Not tested, 1=Susceptible, 2=Intermediate Resistance, 3=Resistant,
4=Tolerance, 5=Delay-Kill Resistance, 6=Escape, 7=Other, specify
_____)

☒ 2 Verticillium wilt

☒ 3 Bacterial blight, give genes if known: B₂, B₃, B₄, B₇

Give races for which resistance is known: 1, 2, 7, 10 and 18

☐ 0 Anthracnose

☒ 2 Fusarium wilt

☐ 0 Ascochyta blight

☒ 1 Rust

☒ 2 Root knot nematode

☒ 1 Reniform nematode

☒ 1 Phymatotrichum root rot

☒ 2 Seedling disease

☐ 0 Specific seedling pathogens

Give pathogen: _____

☒ 2 Seed deterioration

☒ 2 Seed and seedling cold tolerance

☐ Other (Specify) _____

Exhibit D

Additional Description of the Variety

Cascot B-2

This Variety is well adapted for cultivation in the Plains area of Texas and in some of the surrounding areas. It produces well under irrigation but will also give a good crop on dry-land farms.

The stalk is somewhat lax which is conducive to lodging when there is a heavy fruit load. This is an undesirable characterisitic because most of the cotton in that area is stripper harvested for which an upright stalk is desirable. The pea-green color of the foliage offers no disadvantages over the dark green foliage varieties.

Yield is above the average of many commercial varieties grown in that area. The fiber properties are very desirable with a finess of about 5.00, a strength of about 82 1000 P.S.I. and staple length of 1 inch. The grade is usually SM.

Exhibit E

Cascot B-2

Statement of Ownership

The Cascot B-2 Variety was developed in the genetic improvement program of Custom Ag. Services Inc. The original stocks were released to us by the Texas Agricultural Experiment Station.

The release was not an exclusive one, as the public agency breeding material is available to the public. No restrictions or reservations on the use of the material were made by T.A.E.S. Custom Ag. Services Inc. used the released material and by straight selection, developed its own breeding lines. Selections were made in a manner to maintain and or to improve levels of disease resistance and agronomic performance, in comparison with the original T.A.E.S. stocks. Fiber selection was for a longer and stronger fiber with the same high micronair value, in comparison with the TX-Bonham-760 stocks. The Custom Ag. Service Inc. by virtue of making changes and improvements in its own genetic improvement program, utilizing its own facilities and personnel are the owners of the variety named Cascot B-2.